Emotions in services: complaint in B2C e-commerce

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Abstract This study proposes a service recovery (SR) model to describe how cumulative satisfaction, loyalty and word-of-mouth are affected by complaints. The model is based on the role of positive and negative emotions in satisfaction with service recovery (SSR) processes. While prior SSR studies usually investigated only negative emotions and satisfaction with a specific transaction, this research considered both positive and negative emotions.

Keywords: complaint behavior, service recovery, emotions, trust, satisfaction;

1 Introduction

Despite the big efforts companies make to provide high quality services, providing an error-free service is impossible. Errors may frequently cause customer dissatisfaction, which in turn may lead to complaints. Several studies have reported that customer satisfaction is lower for services than products. The actions which a service provider takes in response to service failures and the process by which the company attempts to rectify the failure, known as service recovery, SR, (Kelley and Davis, 1994) are therefore a critical aspect of the interaction between customer and company.

SR offers a chance to reduce dissatisfaction and re-build the damaged relationship with the complaining customer, thus making it possible to achieve a positive outcome from a mistake (Gustafsson, 2009). This study explored in greater depth factors which have an impact on SR, including constructs such as positive and

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negative emotional responses, satisfaction with service recovery (SSR) and the changes in behavior and attitudes which follow: cumulative satisfaction, word-of-mouth (WOM), and loyalty. In order to do so, this study introduced an element which has a considerable relevance to service failure situations – trust – and investigated its role as a mediator of the relationship between emotions and loyalty, and – simultaneously – between SSR and cumulative satisfaction.

2 Literature review and hypothesis

Satisfaction is the result of customers' ex-post assessment based on their experience with the service as a user, which may be indifferent, positive or negative. Satisfaction results when the global experience of using a product or service surpasses the expectations held prior to use; i.e. when there is a positive disconfirmation of expectations. Although the result of a specific transaction (for example, a SR) may not be completely satisfactory, the accumulated experience of transactions might increase overall, or cumulative, satisfaction and thus provide a broader perspective on customer behavior (Maxham and Netemeyer, 2002). Satisfaction with a SR necessarily affects overall, cumulative satisfaction; cumulative satisfaction is the sum of accumulated transaction experiences.

When the provision of services satisfies customers, they have a motivation to transmit their experience to others via WOM (Mangold et al., 1999). There is empirical proof of the relationship between cumulative satisfaction and WOM (Hutchinson et al., 2009). Positive WOM makes it easier to retain customers, and at the same time positions the company as an attractive one, creating incentives for new customers to purchase the services offered (Andreassen, 2001).

In a SR context, customer trust reflects how willing customers are to accept their vulnerability, and their expectation of a positive resolution of any service failure (Dunn and Schweitzer, 2005). When customers receive an unsatisfactory response to their complaint, they lose trust in the organization (DeWitt et al., 2008); likewise, satisfactory resolution of complaints may contribute to an increase trust in the organization.

Customers perceive online retailers as riskier than traditional retailers in terms of delivery, payment medium and terms, information disclosure, etc. B2C-EC customers may therefore prefer to buy from online retailers they can trust (Singh and Sirdeshmukh, 2000). Previous studies have not only confirmed the positive relationship between SSR and trust (Kim et al., 2009), but have also shown that trust is a strong predictor of satisfaction in online environments (Harris and Goode, 2004).

Trust has a positive influence on the purchaser-vendor relationship even if trust is already high (Selnes, 1998). If the customer is satisfied with a SR, his or her trust in the company may generate positive WOM for the company (Kim et al., 2009). The spatial and temporal separation between purchasers and sellers in B2C-ECommerce means that trust is important to continuing loyalty (Chiu et al., 2010).

Although early research studies dealing with the characterization of SR after a complaint behavior focused on applying the theory of justice to SR (Maxham and Netemeyer, 2002), other authors argued for the relevance of affective and emotional –in addition to cognitive – factors following a complaint behavior (Smith and Bolton, 2002). Nevertheless, research on the influence of emotions on SR is scarce (Río-Lanza et al., 2009), although the role of emotions in service encounters is attracting growing interest from the service research community (Hogreve and Gremler, 2009).

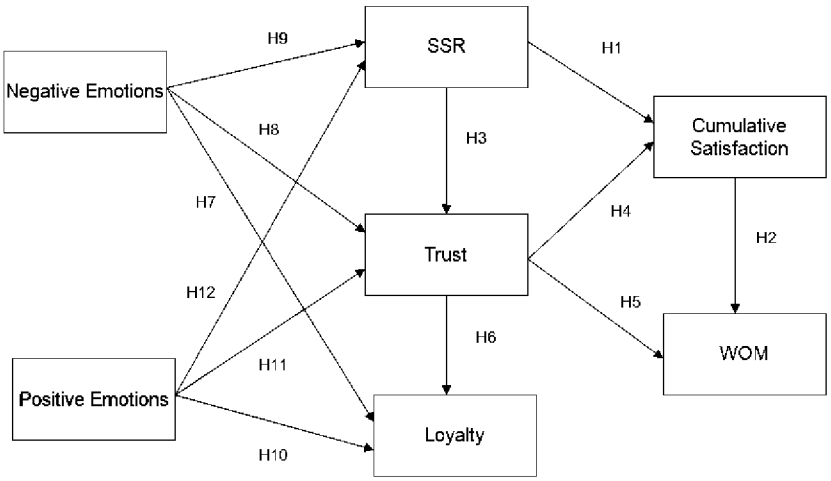

Fig. 1 Research model.

It is only recently that researchers have begun to explore the influence of emotions on trust in SR contexts. Emotions with highly negative valence (such as anger) can play a significant moderating role in SR processes and may damage trust. Emotions also influence SSR: Río-Lanza et al. (2009) demonstrated the influence of negative emotions on SSR, and Schoefer and Ennew (2005) suggested that emotions directly influence customer satisfaction. Following this rationale, we posit next hypothesis (Figure 1):

- ✓ H1. SSR positively predicts cumulative satisfaction.
- ✓ H2. Cumulative satisfaction positively predicts WOM.

- ✓ H3. SSR positively predicts customer trust.
- ✓ H4. Trust positively predicts cumulative satisfaction.
- ✓ H5/H6. Trust positively predicts WOM/loyalty.
- ✓ H7/H8/H9. Negative emotions negatively predict loyalty/trust/SSR.
- ✓ H10/H11/H12. Positive emotions positively predict loyalty/trust/SSR.

3 Methodology and analysis

An online questionnaire on a gross sample of 2,100 Internet users from the Spanish population who made purchases through B2C-EC tested and validated the proposed model, with 303 valid responses from people who had made a complaint after a B2C-EC transaction in the last year. The average profile of the respondent corresponds to a male of 35 to 49 years old, employed and with higher education studies, which is also a similar profile to that of an e-shopper. Data were analyzed using Partial Least Squares (PLS), a technique which allows to analyze non-normal data with small samples.

Prior to the distribution of the final questionnaire, a survey pre-test was performed. The items in the final survey have their source in previous studies. The measurement scales for SSR were an adaptation of the ones proposed by Maxham and Netemeyer (2002) and Kim et al. (2009), while emotional factors are an adaptation of the scales proposed by Río-Lanza et al. (2009), DeWitt et al. (2008) and Chebat and Slusarczyk (2005). Other scales come from the adaptation of Chiu et al. (2010), DeWitt et al. (2008) and Kim et al. (2009)–trust–; DeWitt et al. (2008), and Chebat and Slusarczyk (2005) –loyalty–; Kim et al. (2009) and Mattila (2001) –WOM–; and Bhattacherjee (2001) –cumulative satisfaction–.

In order to analyze the measurement model, a requirement is to test single-item reliability for reflective indicators measuring the factor loadings of the latent variable indicators, which should present a factor loading greater than .707 (Hair et al., 1998) In this case, all the factor loadings exceed .9 except one of the loyalty indicators whose value (.79) exceeds the lower limit by a wide margin. From these results, all indicators were valid in this stage.

Next, this method requires a composite reliability analysis and an analysis of the average variance extracted from the constructs, which should be greater than .7 and .5, respectively, as recommended by several authors (Hair et al., 1998; Fornell and Larcker, 1981). In this case, the values of composite reliability were above .92 and the average variance extracted (AVE) were above .8.

A discriminant validity test was conducted from average variance extracted (AVE) analysis. The correlations between the different constructs are less than

.78, which confirms that every construct measured is dissimilar to the rest (Kline, 1998). The result of the construct-to-item loadings and cross-loadings of the reflective measures are positive, with all items exceeding at least .91. In addition, the loading of the items over their latent variable were much higher than the loading over the rest of the constructs (Chin, 2010).

The structural model analysis considers the relations between the different latent variables. The evaluation of the structural model consists of a bootstrapping procedure using three indicators: path coefficients (β) and t-statistics (Table 1) and explained variance (R^2) –see Figure 2–.

Table 1. Supported and non-supported hypotheses: path coefficients (β) and t-values. *p< .05; ** p< .01; *** p< .001

Hypothesis		**β**	**t value**	**Supported**
H1	SSR→Cumulative Satisfaction	.05	.76	ns
H2	Cumulative Satisfaction→WOM	.58	8.7	***
H3	SSR→Trust	.46	5.81	***
H4	Trust→Cumulative Satisfaction	.49	7.9	***
H5	Trust→WOM	.22	3.4	***
H6	Trust→Loyalty	.41	7.55	***
H7	Negative Emotions→Loyalty	-.15	2.73	**
H8	Negative Emotions→Trust	-.06	1.08	ns
H9	Negative Emotions→SSR	-.27	5.74	***
H10	Positive Emotions→Loyalty	.28	4.57	***
H11	Positive Emotions→Trust	.2	2.53	*
H12	Positive Emotions→SSR	.62	13.74	***

Table path coefficients, also known as structural path coefficients or standarized regression coefficients, represent the extent to which each predictor variable contributes to the explained variance of endogenous variables; in other words, they stand for the strength of the statistical relations in the research model. Path coefficients should be equal to or higher than .2. Significance of path coefficients was calculated with a bootstrapping procedure in order to extract the t-Student values. Finally, the explained variance should be greater than or equal to .1 (Chin, 1998).

All the paths, except negative emotions-trust and SSR-cumulative satisfaction, are significant and exceed the limit value of .2, while negative emotions-loyalty, and positive emotions-trust, with values of -.15 and .2, have a weaker impact.

Analysis results for the research model are shown in figure 2. Therefore, only hypotheses H1 and H8 were rejected (Figure 2).

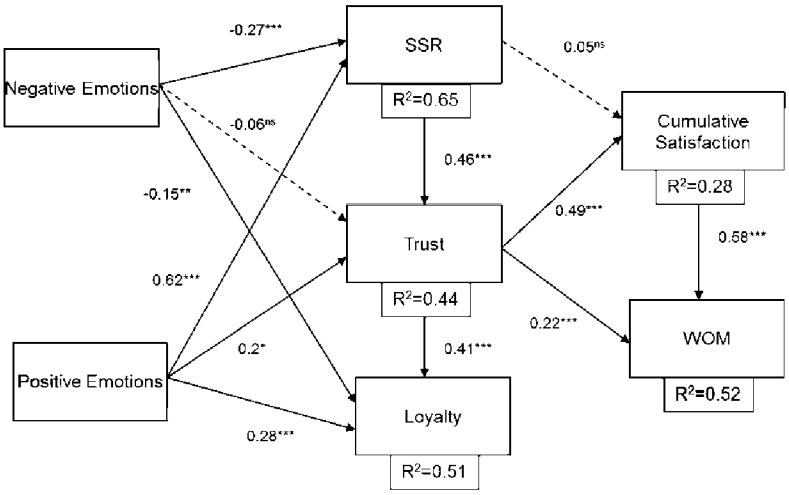

Fig. 2 Results from the research model.

Q^2 parameter from the cross-validation test of Stone-Geisser measures the predictive relevance of the model's constructs with a blindfolding procedure (Chin, 2010) and its values ensure the predictive validity of the model (Q^2 >0 in all cases) (Table 2).

Table 2. Model summary: Stone-Geisser test results (Q2).

	Q^2
SSR	.55
WOM	.43
LOYALTY	.34
TRUST	.33
SATISFACTION	.07

Tenenhaus et al. (2005) provide a parameter to measure the model's goodness of fit (GoF). The value of GoF ranges from 0 to 1, with higher values indicating higher quality of the model. In our study, GoF resulted in a value of .65.

4 Conclusions and managerial implications

This study makes a contribution to the scientific research literature on SSR. It proposes a model of cumulative satisfaction, loyalty and WOM following a SR, with emotions and trust as antecedents. To the best of the authors' knowledge, this research pioneers in the study of the influence of trust and positive and negative emotions on SR. Most SR research studies have used SSR or cumulative satisfaction as outcome variables, but it is also important to consider other variables, such as customer loyalty and WOM, in predicting future behaviors.

The main finding from this study is that positive emotions play a critical role in SR processes. Vendors handling a complaint should not consider the complaint closed until they have detected positive emotions in the customer who issued the complaint. Generation of positive emotions is essential to the achievement of higher levels of SSR as reducing customers' negative emotions have a smaller effect on satisfaction. It follows that customer services should not close any reported complaints until they have verified, using any of the aforementioned tools, resources and techniques, such as webcams or self-observation, that the customer is in a positive emotional state. Surprising customers in a positive way by solving their problems also generate positive emotions, which in turn strengthen trust and help make SR effective.

A straightforward implication of this study is the need to train employees to distinguish and manage customer emotions, especially positive emotions, when a complaint is made; such training might include role-playing and include techniques for the detection of emotions in telephone conversations and e-mails. Providing employees with technological resources which enable them to recognize customers' emotions more accurately (e.g. webcams for videoconferences) and appropriate training might help greatly to improve the quality of SR interactions.

Finally, we would like to emphasize that this research focused on B2C-EC customers who issued a complaint after their purchase, but these results might also be relevant to other sectors and contexts in which the relationship between customers and providers must be mediated with only limited face-to-face interaction.

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